REMARKS

Claims 1-46 remain pending in this application. No claims have been presently amended. No claims have been canceled. New claims 41-46 have been added.

Rejections under – 35 U.S.C. § 103(a)

Claims 1-6, 8-14, 16-22, 24-30, 32-38, and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over a virtual logic system of Smith et al (6,658,564 hereinafter "Smith") in view of a device driver system of Wong et al (US2002/0152331 hereinafter "Wong").

First, Applicant respectfully submits that there is no suggestion to combine the virtual logic system of Smith and the device driver system of Wong. Smith discusses a "virtual logic manager" (Smith, col. 6, line 62) used with "a suitable programmable logic device" such as "FLEX EPF10K50 device from Altera Corporation" (Smith, col. 4, lines 9-11). With the virtual logic manager of Smith, "a relatively small amount of physical programmable logic devices may be made to appear to an application as a relative large amount of logical programmable logic devices." (Smith, col. 63-66) "This is achieved by using virtual logic manger 54 to perform run-time swapping of programmable logic device configuration data and state information in and out of programmable logic device" (Smith, col. 6, line 66 to col. 7, line 2). As such, Smith virtualizes blocks within a hardware programmable logic device, such as an FPGA device by Altera.

In contrast, Wong discusses a software "user mode device driver interface" (see Wong, Abstract) for devices such as "a microphone, joystick, game pad, satellite dish, scanner, or the like" (Wong, page 2, [0017]). Wong merely "calls the kernel-mode graphics driver entry points..for graphics operations and services" in response to "internal events or calls by an application" (Wong, page 3, [0024]). As such, Wong has nothing to do with virtualizing blocks within a hardware programmable logic device, but rather Wong merely discusses software communication between an application and a kernel. Therefore, there is no suggestion to combine Smith with Wong or Wong with Smith, within the references themselves; and one with ordinary skill in the art would not combine these two references because there would be no motivation to combine and there would not be any reasonable expectation of success.

Second, Applicant respectfully submits that even if the combination of the virtual logic system of Smith and the device driver system of Wong were proper, the combination would be different than the Applicant's claims, and would not work. The combination might be a system that virtualizes blocks within a hardware programmable logic device, such as an FPGA device by Altera, and calls the kernel-mode graphics driver entry points for graphics operations and services in response to internal events or calls by an application. This combination would not work for any unitary purpose, and would be different than the Applicant's claims. The combination cannot teach or describe, at least: returning, by the graphics kernel, "an address for the graphics resource to the graphics client"; receiving, by the graphics kernel, "a command from the graphics client specifying the address" (Claim 1, 9, 17, 25, 33). In addition, Applicant respectfully submits that claims 2-6, 8, 10-14, 16, 18-22, 24, 26-30, 32, 34-38, and 40 are allowable at least because they are dependent on an allowable independent claim.

Allowable Subject Matter in New Claims

Applicant respectfully thanks the Examiner for allowing claims 7, 15, 23, 31, and 39 if rewritten in independent form including all of the limitations of the base claim and any intervening claims. New claims 41, 42, 43, 44, 45 are rewritten claims of claims 7, 15, 23, 41, and 39 respectively, including essentially all of the limitations of the base claim and any intervening claims. Similarly, Applicant respectfully submits that new claim 46 adds on new matter, and includes essentially all of the limitations of allowable claims 7, 15, 23, 31, and 39. As such, Applicant respectfully requests that the Examiner allow new claims 41-46.

Invitation for a telephone interview

The Examiner is invited to call the undersigned at 408-720-8300 if there remains any issue with allowance of this case.

Conclusion

For the foregoing reasons, the present application is believed to be in condition for allowance, and such action is earnestly requested. If any additional fee is required, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 12/3/64

Raj V. Abhyanker
Reg. No. 45,474

Customer No. 26529

12400 Wilshire Boulevard

Seventh Floor

Los Angeles, CA 90025-1030

(408) 720-8300